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EXAMINER

MCLEOD, MARSHALL M

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/814,117	Applicant(s) LAVALLEE ET AL.	
	Examiner MARSHALL MCLEOD	Art Unit 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/27/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36,42-45 and 48-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36,42-45 and 48-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-36, 42-45 and 48-56 are pending in this action. Claims 37-41 and 46-47 are cancelled without prejudice and claims 50-56 were added by way of this amendment.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-18, 20-36, 42-45 and 48-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Heitman et al. (Patent No US 6,920,494 B2), hereinafter Heitman.**

4. With respect to claim 1, Heitman discloses displaying a physical network topology associated with the storage area network on a display screen (Column 3, lines 34-36), the physical network topology including identification of at least one switch resource that supports connectivity among host resources and storage resources in the storage area network (Figure 165, Column 3, lines 30-31); receiving a signal indicating a selected at least one managed resource associated with the storage area network (Column 5, line 20); and displaying a virtual network topology associated with the selected at least one managed resource in relation to the physical network topology (Column 3, lines 34-39; Column 45, lines 23-25).

5. With respect to claim 2, Heitman discloses overlaying the virtual network topology associated with the selected at least one managed resource on the displayed physical network topology, the method further comprising (Column 3, lines 34-39): displaying port identification information in relation to corresponding ports in the at least one switch resource to identify which ports of the at least one switch resource are associated with the virtual network topology (Column 6, lines 59-67, continued through to Column 7, lines 1-2).

6. With respect to claim 3, Heitman discloses displaying and overlaying are executed by a resource manager application of the storage area network (Column 2, lines 60-65), the resource manager application enabling a network manager to select and view at least one virtual storage area network as a portion of the physical network topology (Column 3, lines 34-44; and wherein displaying port identification information includes highlighting which ports of the at least one switch source belong to the virtual network topology (Column 7, lines 12-22).

7. With respect to claim 4, Heitman discloses wherein receiving a signal indicating a selected at least one managed resource associated with the storage area network includes receiving a selection associated with a virtual first storage area network and a second virtual storage area network (Column 6, lines 58-67, continued through to Column 7, lines 1-2; as evidenced by the title of the paragraph on Column 6, line 58, the storage area networks (SAN) that the paragraph discloses are virtual); and wherein displaying the virtual network topology includes: simultaneously displaying, on the display screen, representations of i) the first virtual

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storage area network associated with a first selected managed resource, and ii) the second virtual storage area network associated with a second selected managed resource (Column 10, lines 2-16); the first virtual storage area network and the second storage area network being uniquely illustrated as portions of the physical network topology displayed on the display screen (Column 10, lines 17-32).

8. With respect to claim 5, Heitman discloses highlighting portions of the physical network topology with a first color to identify network resources associated with the first storage area network; and highlighting portions of the physical network topology with a second color to identify network resources associated with the second storage area network (Column 10 lines 62-67, continued through to Column 11, lines 1-3).

9. With respect to claim 6, Heitman discloses displaying a virtual storage area network associated with the at least one selected managed resource on the display screen (Column 3, lines 34-44); and highlighting portions of the physical network topology to identify at least partial paths between host resources and storage resources associated with the virtual storage area network (Column 49, lines 41-51).

10. With respect to claim 7, Heitman discloses that in a first region of the display screen, displaying multiple icons representing corresponding managed resources associated with the storage area network (Column 37, lines 28-34); and in relation to the multiple icons, maintaining

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corresponding display regions to receive input commands from a user making a corresponding selection of the at least one managed resource (Column 37, lines 28-39).

11. With respect to claim 8, Heitman discloses enabling a user to expand a view of the hierarchy of multiple icons to facilitate a selection of the at least one managed resource associated with the storage area network (Column 37, lines 40-46).

12. With respect to claim 9, Heitman discloses that in a first region of the display screen, displaying a hierarchy of multiple icons representing corresponding managed resources associated with the storage area network (Column 37, lines 40-48; as disclosed in the prior art FIG 17; illustrates a display 102 illustrating a panel 104 that includes a containment tree hierarchy having a storage device at the top, and a LUN contained in the storage device at a level beneath the storage device; which reads on applicants' claimed invention); enabling a user to make a selection of at least one of the multiple icons to select the at least one managed resource associated with the storage area network (Column 37, lines 36-39); and in a second region of the display screen, displaying the physical network topology and the virtual network topology (Column 37, lines 33-39).

13. With respect to claim 10, Heitman discloses displaying the hierarchy of multiple icons includes displaying the hierarchy of icons the display screen (Column 37, lines 40-48; as disclosed in the prior art FIG 17; illustrates a display 102 illustrating a panel 104 that includes a containment tree hierarchy having a storage device at the top, and a LUN contained in the

storage device at a level beneath the storage device; which reads on applicants' claimed invention); and wherein displaying the virtual network topology associated with the selected at least one managed resource includes displaying the virtual network topology on the display screen, the method further comprising (Column 37, lines 40-58): in relation to the hierarchy of multiple icons the display screen, maintaining corresponding selectable display regions to receive input commands from a user making a corresponding selection of the at least one managed resource (Column 37, lines 40-58).

14. With respect to claim 11, Heitman discloses receiving the signal indicating the selected at least one managed resource includes receiving a first signal identifying a virtual storage area network associated with the storage area network (Column 6, lines 59-67, continued through to Column 7, lines 1-2); and wherein displaying the virtual network topology includes displaying specific ports and corresponding identifications of the specific ports of the at least one switch resource associated with the virtual storage area network (Column 10, lines 7-16).

15. With respect to claim 12, Heitman discloses receiving a second signal identifying a selected zone associated with the virtual storage area network (Column 10, lines 7-16); and in response to receiving the second signal, displaying at least one host resource and at least one storage resource associated with the selected zone in relation to the virtual storage area network on the display screen (Column 10, lines 7-16).

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16. With respect to claim 13, Heitman discloses that on the display screen, highlighting connection paths between the at least one host resource and the at least one switch resource as well as between the at least one switch resource and the at least one storage resource to identify network resources associated with the selected zone (Column 52, lines 64-67, continued through to Column 53, lines 1-11).

17. With respect to claim 14, Heitman discloses displaying the at least one host resource and the at least one storage resource associated with the selected zone includes: displaying an identification of host resource ports associated with the at least one host resource that physically couple to corresponding switch resource ports of the at least one switch resource (Column 6, lines 59-67, continued through to Column 7, lines 1-2); and displaying an identification of storage resource ports of the at least one storage resource that physically couple to corresponding switch resource ports of the at least one switch resource (Column 53, lines 5-11).

18. With respect to claim 15, Heitman discloses displaying multiple icons representing corresponding selectable managed resources associated with the storage area network (Column 3, lines 34-44), at least one of the selectable managed resources representing a virtual network topology that may be selected for viewing in a second region of the display screen (Column 37, lines 33-39); and displaying the virtual storage area network topology based on a selection of at least one of the multiple icons, the virtual storage area network i) being overlayed on the physical network topology, and ii) including identified ports of the at least one switch resource that are associated with a corresponding virtual storage area network (Column 53, lines 1-11).

19. With respect to claim 16, Heitman discloses in a first region of the display screen: displaying multiple icons representing corresponding selectable managed entities associated with the storage area network, at least one of the selectable managed entities representing a virtual network topology that may be selected for viewing in a second region of the display screen; in the second region of the display screen (Column 37, lines 28-39): displaying a physical network topology associated with the storage area network, the physical network topology including at least one switch resource that supports connectivity among host resources and storage resources in the storage area network (Column 3, lines 66-67, continued through to Column 4, lines 1-8 and Figure 165, Column 3, lines 30-31); and displaying the virtual storage area network topology based on a selection of at least one of the multiple icons, the virtual storage area network i) being overlayed on the physical network topology, and ii) including identified ports of the at least one switch resource that are associated with a corresponding virtual storage area network (Column 53, lines 1-11).

20. With respect to claim 17, Heitman discloses displaying the virtual network topology includes: simultaneously displaying i) a first virtual storage area network associated with a first selected managed entity, and ii) a second virtual storage area network associated with a second selected managed entity (Column 10, lines 2-16); and the first virtual storage area network and the second storage area network being illustrated as portions of the physical network topology displayed on the display screen (Column 10, lines 17-32).

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21. With respect to claim 18, Heitman discloses highlighting portions of the physical network topology to identify at least partial paths between host resources and storage resources associated with the first virtual storage area network and the second storage area network (Column 49, lines 41-51).

22. With respect to claim 20, Heitman discloses displaying at least one host resource and at least one storage resource associated with the virtual storage area network topology on the display screen (Column 3, lines 39-44).

23. With respect to claim 21, Heitman discloses in the second region of the display screen, highlighting connection paths between the at least one host resource and the at least one switch resource as well as between the at least one switch resource and the at least one storage resource (Column 52, lines 64-67, continued through to Column 53, lines 1-11); displaying an identification of host resource ports associated with the at least one host resource that physically couple to corresponding switch resource ports of the at least one switch resource (Column 53, lines 1-11); and displaying an identification of storage resource ports of the at least one storage resource that physically couple to corresponding switch resource ports of the at least one switch resource (Column 53, lines 1-11).

24. With respect to claim 22, see claim 1 above.

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25. With respect to claim 23, Heitman discloses displaying the virtual network topology includes displaying specific ports and corresponding identifications of the specific ports of the at least one switch resource associated with the at least one virtual network (Column 10, lines 7-16).

26. With respect to claim 24, Heitman discloses displaying at least one host resource and at least one storage resource associated with the at least one virtual network on the display screen (Column 10, lines 7-16).

27. With respect to claim 25, Heitman discloses highlighting connection paths between the at least one host resource and the at least one switch resource as well as between the at least one switch resource and the at least one storage resource (Column 52, lines 64-67, continued through to Column 53, lines 1-11).

28. With respect to claim 26, Heitman discloses displaying unique identification information of host resource ports associated with the at least one host resource that physically couple to corresponding switch resource ports of the at least one switch resource (Column 6, lines 59-67, continued through to Column 7, lines 1-2); and displaying unique identification information of storage resource ports of the at least one storage resource that physically couple to corresponding switch resource ports of the at least one switch resource (Column 53, lines 5-11).

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29. With respect to claim 27, Heitman discloses a computer system for displaying management information associated with a storage area network, the computer system comprising: a processor; a memory unit that stores instructions associated with an application executed by the processor; and an interconnect coupling the processor and the memory unit, enabling the computer system to execute the application and perform operations of (Column 22, lines 1-19): displaying a physical network topology associated with the storage area network on a display screen (Column 3, lines 34-36), the physical network topology including identification of at least one switch resource that supports connectivity among host resources and storage resources in the storage area network (Column 3, lines 34-44 and Figure 165, Column 3, lines 30-31); receiving a signal indicating a selected at least one managed resource associated with the storage area network (Column 5, lines 19-29); and displaying a virtual network topology associated with the selected at least one managed resource in relation to the physical network topology (Column 3, lines 34-39).

30. With respect to claim 28, see claim 2 above.

31. With respect to claim 29, Heitman discloses displaying port identification information includes highlighting which ports of the at least one switch source belong to the virtual network topology (Column 7, lines 12-22).

32. With respect to claim 30, see claim 4 above.

33. With respect to claim 31, see claim 5 above.
34. With respect to claim 32, see claim 6 above.
35. With respect to claim 33, see claim 7 above.
36. With respect to claim 34, see claim 8 above.
37. With respect to claim 35, see claim 9 above.
38. With respect to claim 36, see claim 10 above.
39. With respect to claim 42, Heitman discloses a computer system for displaying management information associated with a storage area network, the computer system comprising: a processor; a memory unit that stores instructions associated with an application executed by the processor; and an interconnect coupling the processor and the memory unit, enabling the computer system to execute the application and perform operations of (Column 22, lines 1-19): in a first region of the display screen: displaying multiple icons representing corresponding selectable managed entities associated with the storage area network, at least one of the selectable managed entities representing a virtual network topology that may be selected for viewing in a second region of the display screen (Column 37, lines 28-39); in the second region of the display screen: displaying a physical network topology associated with the storage

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area network, the physical network topology including at least one switch resource that supports connectivity among host resources and storage resources in the storage area network (Column 3, lines 66-67, continued through to Column 4, lines 1-8 and Figure 165, Column 3, lines 30-31); and displaying the virtual storage area network topology based on a selection of at least one of the multiple icons, the virtual storage area network i) being overlayed on the physical network topology, and ii) including identified ports of the at least one switch resource that are associated with a corresponding virtual storage area network (Column 53, lines 1-11).

40. With respect to claim 43, see claim 17 above.

41. With respect to claim 44, see claim 18 above.

42. With respect to claim 45, see claim 19 above.

43. With respect to claim 48, Heitman discloses a computer program product including a computer-readable medium having instructions stored thereon for processing data information, such that the instructions, when carried out by a processing device, enable the processing device to perform the steps of (Column 15, lines 11-30): displaying a physical network topology associated with the storage area network on a display screen (Column 3, lines 34-36), the physical network topology including identification of at least one switch resource that supports connectivity among resources in the storage area network (Column 3, lines 34-44); receiving input from a user to display at least one virtual network associated with the storage area network

(Column 5, lines 19-29); and displaying a virtual network topology associated with the at least one virtual network in relation to the physical network topology on the display screen (Column 3, lines 34-39; Column 45, lines 23-25).

44. With respect to claim 49, see claim 1 above.

Claim Rejections - 35 USC § 103

45. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

46. **Claim 19 is rejected as being unpatentable over Heitman et al. (Patent No US 6,920,494 B2), hereinafter Heitman in view of Heitman.**

47. With respect to claim 19, Heitman discloses displaying the first region on the display screen, the first region including a vertically disposed hierarchy of multiple icons representing corresponding selectable and expandable managed entities associated with the storage area network (Column 37, lines 40-48; as disclosed in the prior art FIG 17; illustrates a display 102 illustrating a panel 104 that includes a containment tree hierarchy having a storage device at the top, and a LUN contained in the storage device at a level beneath the storage device; which reads on applicants' claimed invention); displaying the virtual network topology and physical network

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topology on the display screen (Column 37, lines 40-48; FIG 17; also see Figure 34). Heitman does not teach displaying the virtual network topology including specific ports and corresponding identification information of the specific ports of the at least one switch resource associated with the virtual storage area network topology; and highlighting the specific ports of the at least one switch resource to indicate that the specific ports are part of the virtual storage area network topology. As disclosed by applicants' claim.

However, Heitman does teach displaying the virtual network topology including corresponding identification information (Figure 34) and Heitman also teaches specific ports of the at least one switch resource associated with the virtual storage area network topology (Column 7, lines 8-22).

It would have been obvious to a person skilled in the art at the time of the invention to modify the teachings of Heitman with itself to display the ports of the switch along with the other currently displayed resources of the physical and virtual network in order to achieve a more user friendly software.

Heitman also teaches highlighting components (Column 10, lines 62-67 and continued through to Column 11, lines 1-3). Heitman also teaches specific ports of the at least one switch resource to indicate that the specific ports are part of the virtual storage area network topology (Column 45, lines 26-40).

It would have been obvious to a person skilled in the art at the time of the invention to modify the teachings of Heitman with itself to highlight the specific ports of the switch resource to indicate that the switch is part of the virtual network, in order to achieve a more user friendly software.

Claim Rejections - 35 USC § 103

48. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

49. **Claims 50-56 are rejected as being unpatentable over Heitman in view of Miyake (Pub. No US 2004/0064545 A1).**

50. With respect to claim 50, the claim is rejected for the same reasons as claim 1 above. In addition Heitman discloses a displaying an expandable folder in a hierarchical tree, the hierarchical tree including resources present in the storage area network (Column 37, lines 40-65; Figure 17, item 102; the “My Work” folder shows the expandable view of the folder); displaying multiple selectable symbols in the expandable folder (Column 37, lines 40-65; Figure 17); receiving selection of a given selectable symbol in the folder; and in response to receiving the selection of the given selectable symbol (Column 37, lines 40-65; Figure 17). Heitman does not disclose each of the multiple selectable symbols in the folder representing corresponding zones in the storage area network; overlaying a selected zone, as represented by the given selectable symbol, on the physical network topology.

However, Miyake discloses each of the multiple selectable symbols in the folder representing corresponding zones in the storage area network (Page 5; [0067], lines 1-10; Figure 9); overlaying a selected zone, as represented by the given selectable symbol, on the physical network topology (Page 5; [0067], lines 1-10; Figure 9).

It would have been obvious to a person skilled in the art at the time of the invention to modify the teachings of Heitman with the teachings of Miyake in order to implement a more user friendly software.

51. With respect to claim 51, the claim is rejected for the same reasons as claim 50 above. In addition Heitman does not disclose wherein overlaying the selected zone on the physical network topology includes: highlighting which portions of the physical network topology represent the selected zone topology.

However, Miyake discloses wherein overlaying the selected zone on the physical network topology includes: highlighting which portions of the physical network topology represent the selected zone topology (Page 5; [0067], lines 1-10).

52. With respect to claim 52, the claim is rejected for the same reasons as claim 51 above. In addition Heitman discloses utilizing distinctive markings in the hierarchical tree in the folder (Column 57, lines 1-2 continued through to Column 58, lines 1-2; Figure 34). Heitman does not disclose a selected zone; wherein highlighting which portions of the physical network topology represent the selected zone includes: utilizing distinctive markings in the physical network

topology to indicate which portions of the physical network topology represent the selected zone from the folder.

However, Miyake discloses a selected zone (Page 5; [0062], lines 1-15); wherein highlighting which portions of the physical network topology represent the selected zone includes: utilizing distinctive markings in the physical network topology to indicate which portions of the physical network topology represent the selected zone (Page 5; [0067], lines 1-10).

It would have been obvious to a person skilled in the art at the time of the invention to modify the teachings of Heitman with the teachings of Miyake in order to implement a more user friendly software by allowing a user to easily read the display screen and locate the components through the use of distinctive markings.

53. With respect to claim 53, the claim is rejected for the same reasons as claim 52 above. In addition the combined teachings of Heitman and Miyake discloses for each additional zone selected from the folder: utilizing distinctive markings in the physical network topology (Heitman; Column 57, lines 1-2 continued through to Column 58, lines 1-2; Figure 34) to indicate each additionally selected zone (Miyake; Page 5; [0067], lines 1-10); utilizing distinctive markings in the physical network topology to indicate which portions of the physical network topology (Heitman; Column 57, lines 1-2 continued through to Column 58, lines 1-2; Figure 34) represent each additionally selected zone in the folder (Miyake; Page 5; [0067], lines 1-10); and the distinctive markings in the folder and the distinctive markings in the physical network topology enabling a viewer to identify which portions of the physical network topology

(Heitman; Column 57, lines 1-2 continued through to Column 58, lines 1-2; Figure 34)
correspond to different selected zones in the folder (Miyake; Page 5; [0067], lines 1-10).

54. With respect to claim 54, the claim is rejected for the same reasons as claim 51 above. In addition the combined teachings of Heitman and Miyake discloses in response to receiving selection of the given selectable symbol in the folder of the hierarchical tree, initiating expansion of the physical network topology to include additional network resources of the storage area network (Heitman; Column 37, lines 40-65).

55. With respect to claim 55, the claim is rejected for the same reasons as claim 1 above. In addition the combined teachings of Heitman and Miyake discloses displaying a symbol representing a zone of the storage area network (Miyake; Page 5; [0067], lines 1-10); and in response to receiving selection of the symbol, marking the physical network topology to indicate ports of the at least one switch resource in the physical topology that make up the zone (Heitman; Column 45, lines 26-40).

56. With respect to claim 56, the claim is rejected for the same reasons as claim 55 above. In addition the combined teachings of Heitman and Miyake wherein displaying the symbol includes: in a separate region than the physical topology, displaying the symbol in a hierarchy of resources associated with the storage area network (Heitman; Column 37, lines 40-65); and displaying the symbol to include text indicating a corresponding name of the zone (Page 5; [0067], lines 1-10; Figure 9).

Response to Arguments

57. Applicant's arguments filed 27 March 2008 have been carefully and respectfully considered in light of the instant amendment, but are still not persuasive.

58. With respect to applicants' argument in the middle of page 22 of the instant arguments, in regards to the rejection of claim 1. Applicant contends that the office action asserts disjoint and unrelated passages in Heitman to reject the claimed invention. The claimed invention recites receiving a signal indicating a selected resource and displaying a virtual network topology associated with the selected resource. The cited passages in Heitman are not equivalent to these steps. The examiner respectfully disagrees, and refers applicant to the rejection of claim 1 above in conjunction with prior art Heitman (Column 6, lines 29-42; i.e. event notification reads on applicants claim of receiving a signal and ... the manager service to update the second representation reads on applicants claim of a selected resource). Applicant also contends at the bottom of page 23 that the cited prior art does not teach or suggest receiving a selection of a resource and displaying a VSAN associated with the resource. The examiner respectfully disagrees, and refers applicant to the rejection of claim 1 above in conjunction with prior art Heitman (Column 6, lines 59-67 continued through to Column 7, lines 1-9; discloses receiving a selection of what port a host can access (i.e. a resource) and displaying a virtual san associated with the resource). Also the examiner directs applicants' attention to Heitman (Column 45, lines 23-25; i.e. to clarify and explain to applicant that the term SAN in the prior art includes both virtual and physical SANs as disclosed in the prior art).

59. With respect to applicant's arguments at the bottom of page 24 of the instant arguments, in regards to the rejections of dependent claims 2-15. Applicant contends that because the claims are dependent on independent claim 1 which applicant believes to be allowable, the dependent claims are therefore allowable. The examiner respectfully disagrees, and refers the applicant to the examiner's response above to the applicants' arguments for independent claim 1, in conjunction with the rejections above for dependent claims 2-15.

60. With respect to applicant's arguments at the bottom of page 24 of the instant arguments, in regards to the rejections of independent claim 22 and claims 23-26 which depend on claim 22. Applicant contends that because claim 22 includes similar patentable distinctions over the cited prior art as claim 1 the claims should be allowable. The examiner respectfully disagrees, and refers the applicant to the examiner's response above to the applicants' arguments for independent claim 1, in conjunction with the rejections above for claim 22 and dependent claims 23-26.

61. With respect to applicant's arguments at the bottom of page 24 of the instant arguments, in regards to the rejections of independent claim 27 and claims 28-36 which depend on claim 27. Applicant contends that because claim 27 includes similar patentable distinctions over the cited prior art as claim 1 the claims should be allowable. The examiner respectfully disagrees, and refers the applicant to the examiner's response above to the applicants' arguments for independent claim 1, in conjunction with the rejections above for claim 27 and dependent claims 28-36.

62. With respect to applicant's arguments at the top of page 25 of the instant arguments, in regards to the rejections of independent claims 48 and 49. Applicant contends that because claim 48 and 49 includes similar patentable distinctions over the cited prior art as claim 1 the claims should be allowable. The examiner respectfully disagrees, and refers the applicant to the examiner's response above to the applicants' arguments for independent claim 1, in conjunction with the rejections above for independent claims 48 and 49.

63. With respect to applicant's arguments in the middle of page 25 of the instant arguments, in regards to the rejection of claim 2. Applicant contends that Heitman provides no indication whatsoever of "overlaying" a virtual network topology on a currently displayed physical topology as recited by the claimed invention. The examiner respectfully disagrees, and refers the applicant to Heitman (Column 45, lines 23-25; i.e. to clarify and explain to applicant that the term SAN in the prior art includes both virtual and physical SANs). Thus Heitman (Column 3, lines 39-44; discloses "overlaying" by stating that the GUI can provide a plurality of Representing hosts, storage devices or logical units, associations therebetween, which reads on applicants' claim because the GUI can provide for storage devices (i.e. the physical part of the overlay) or logical units (i.e. the virtual part of the overlay).

64. With respect to applicant's arguments in the middle of page 26 of the instant arguments, in regards to the rejection of dependent claim 3. Applicant contends that Heitman only provides management functions, none of which include "overlaying" as in the claimed invention. The examiner respectfully disagrees and refers the applicant to Heitman (Column 3, lines 34-44;

where the prior art discloses ... manager includes a GUI for display... representing hosts, storage devices (or logical units), associations therebetween. The prior art discloses the logical units (i.e. virtual) for storage devices and associations therebetween, which is an overlay handled by the manager. Applicant also contends that there is no indication whatsoever that the manager in Heitman enables selection and viewing of a virtual storage area network as a portion of a physical topology. The examiner respectfully disagrees, and refers the applicant to Heitman (Column 45, lines 23-25; i.e. to clarify and explain to applicant that the term SAN in the prior art includes both virtual and physical SANs). Thus Heitman (Column 3, lines 39-44; discloses "overlaying" by stating that the GUI can provide a plurality of Representing hosts, storage devices or logical units, associations therebetween, which reads on applicants' claim because the GUI can provide for storage devices (i.e. the physical part of the overlay) or logical units (i.e. the virtual part of the overlay). The examiner also respectfully refers applicant to Heitman (Column 3, lines 66-67 continued through to Column 4, lines 1-3). Applicant also contends that Heitman only indicates that a manager disambiguates received information to discern a network topology and such functions are not equivalent to highlighting which ports of a switch belong to a corresponding virtual network topology as in claim 3. The examiner respectfully disagrees, and refers the applicant to Heitman (Column 45, lines 26-40) in conjunction with the rejection above for claim 3.

65. With respect to applicant's arguments in the middle of page 27 of the instant arguments, in regards to the rejection of dependent claim 4. Applicant contends that prior art Heitman has no indication whatsoever of receiving a selection of a first storage area network and a second

storage area network. The examiner respectfully disagrees, and refers the applicant to Heitman (Column 7, lines 24-34; i.e. which discloses ...maintain an internal representation of the SAN in a first data store (i.e. a first storage area network) and that maintains a separate store (i.e. a second store)). The applicant also claims that Heitman has no indication whatsoever that the manager in Heitman enables selection and viewing of multiple virtual storage area networks as portions of a physical storage area network topology as recited by the claimed invention. The examiner respectfully disagrees, and refers the applicant to Heitman (Column 7, lines 24-34; i.e. discloses ... the first store to generate a display) in conjunction with the rejection above for claim 4.

66. With respect to applicant's arguments in the middle of page 28 of the instant arguments, in regards to the rejection of dependent claim 6. Applicant contends that prior art Heitman's list does not include nor is it suggestive of highlighting portions of a physical network to identify portions associated with a virtual storage area network. The examiner respectfully disagrees, and refers the applicant to Heitman (Column 47, lines 11-29; i.e. discloses displaying the SAN topology where graphical objects can be color coded (i.e. highlight) to indicate missing or new component i.e. physical components of the SAN network which include both a physical and a virtual network as previously disclosed) in conjunction with the rejection above for claim 6.

67. With respect to applicant's arguments at the top of page 29 of the instant arguments, in regards to the rejection of dependent claim 12. Applicant contends that prior art recites no more than a graphical user interface for displaying portions of a storage area network. The examiner

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respectfully disagrees, and refers the applicant to Heitman (Column 6, lines 9-27; i.e. discloses selecting portions of a storage network for display on a graphical user interface and also representing components of the SAN in a region (i.e. zone)...) in conjunction with the rejection above for claim 12.

68. With respect to applicant's arguments in the middle of page 29 of the instant arguments, in regards to the rejection of dependent claim 13. Applicant contends that prior art Heitman recites nothing more than a graphical user interface for displaying storage area network information. The examiner respectfully disagrees, and refers the applicant to Heitman (Column 52, lines 64-67 continued through to Column 53, lines 1-11; i.e. which discloses a GUI displaying a SAN topology and in some embodiments the selected status of components and interconnects are displayed which reads on applicants claim of highlighting connection paths between the at least one host resource.....associated with the selected zone, because the interconnects disclosed by the prior art will show the user where (i.e. zone) each component is connected and to what that component is connected to).

69. With respect to applicant's arguments at the bottom of page 29 of the instant arguments, in regards to the rejection of claim 14. Applicant contends that the cited passage is directed to determining a presence of a VSAN. This is not equivalent to displaying a selected zone in a manner as recited by claim 14. The examiner respectfully disagrees, and refers the applicant to Heitman (Column 6, lines 59-67 continued through to Column 7, lines 1-2; i.e. which discloses a

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storage device (i.e. a resource) associated with a selected zones or regions) in conjunction with the rejection above for claim 14.

70. With respect to applicant's arguments at the bottom of page 30 of the instant arguments, in regards to the rejection of claim 16. Applicant contends that that mere reciting that a resource can be selected for viewing of properties on a display screen is not equivalent to the claimed invention. The examiner respectfully disagrees, and refers the applicant to Heitman (Column 37, lines 28-39; discloses icons in Figure 16 represents selectable managed components (i.e. entities) that may be selectable for viewing). Applicant also contends that the prior art does not provide an indication of ports of a switch resource that are part of the virtual storage area network. The examiner respectfully disagrees, and refers the applicant to Heitman (Column 45, lines 23-40; i.e. which discloses ports of a switch that is part of a VSAN).

71. With respect to applicant's arguments at the top of page 31 of the instant arguments, in regards to the rejection of dependent claims 17-21. Applicant contends that because the claims are dependent on independent claim 16 which applicant believes to be allowable, the dependent claims are therefore allowable. The examiner respectfully disagrees, and refers the applicant to the examiner's response above to the applicants' arguments for independent claim 16, in conjunction with the rejections above for dependent claims 17-21.

72. With respect to applicant's arguments at the top of page 31 of the instant arguments, in regards to the rejection of independent claim 42 and dependent claims 17-21. Applicant

contends that because the claim 42 recites similar reasons to that of claim 16 the claim is allowable and as such claims 43-45 which depend upon claim 16 are therefore allowable. The examiner respectfully disagrees, and refers the applicant to the examiner's response above to the applicants' arguments for independent claim 16, in conjunction with the rejections above for dependent claims 43-45.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARSHALL MCLEOD whose telephone number is (571)270-3808. The examiner can normally be reached on Monday - Thursday 6:30 a.m-4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marshall McLeod
6/18/2008

/Ario Etienne/
Supervisory Patent Examiner, Art Unit 2157